How To Develop A Successful Technology Product

Written: Alex Gudilko

AJPROTECH LLC

Date: April 9, 2020

AJPROTECH

How to develop a successful technology product

Alex Gudilko | Proven way to create technical products

The IoT and technology market has EXPLODED in the last decade. Are you thinking of designing a product that would make a difference? These 10 tips will help you get your product or service to customers who crave for it and avoid costly mistakes. Here is what we learned on a long journey while building both hardware and software for over 40 products with $10M+ in sales.

10 Steps to transform idea into a product:
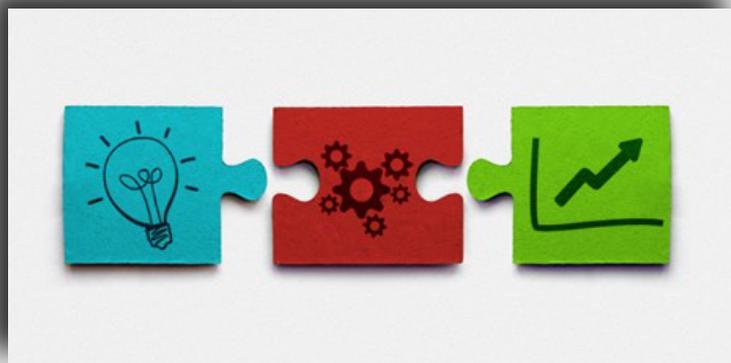
STEP 1: SIGN NDA

When you are ready to take the conversation out your friends and family circle, make sure anyone you discuss the details with also signs a non-disclosure agreement: Vendors, market researchers, advertisers, and engineering companies. It's alright to discuss your idea briefly to see if there is mutual interest in continuing the conversation but make sure you sign non-disclosure before you get to details, the secret sauce. Spoiler: VCs will not sign an NDA - it is a "trust or leave" game.

Download Mutual NDA for Technical Project Discussion

STEP 2: DO MARKET RESEARCH

Know your competitors. Make sure you know who is out there, compile a list of similar products. Check how mature their technology is; do they have sales? Define 2-3 key points how you can be different. It's not about who gets there first, it's who gives the customer what they need.

Did you know that Vimeo created a video streaming service before YouTube but it's YouTube that's worth billions now? Why is this? Their market research showed that the key to growth was viewers sharing with their friends, so they literally put a "share" button in 5 places on their page compared to one at Vimeo.

Market research will help identify key areas where you need to push HARD.

STEP 3: BUILD A CLEAR VISION

Creating a great product is a journey, so start with your ideal vision. When I start a new venture, I always ask myself how I want my legacy to be associated with it. How would your partner, parents, or newspapers speak of it once released?

> *On a piece of paper (or napkin), record:*
>   *Today's date*
>   *Who is your ideal customer*
>   *What your product will solve*
>   *What you do not want to be associated with.*
>
> *Then take a picture and save it to Dropbox or Google Drive. Check on it along the way to make sure you stay on track.*
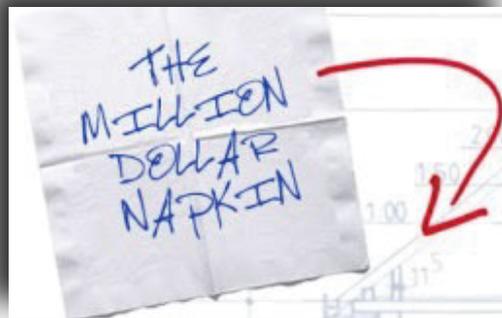
STEP 4: FIND A TECHNOLOGY PARTNER

What is your superpower? Do you have a technical background or you prefer to create and market the product? We have a tendency to try to do it all ourselves: "I will find _____, "I will manage _____".

In reality, product development takes months, and if you try to handle technical aspects yourself, you will be missing out on the creative portions, like marketing or sales. If you ask me what about the most important thing I learned after launching tens of products with millions in sales, it would be: "DO WHAT YOU DO BEST, HIRE THE REST!"

Find a technical partner who understands product development, define how equity would be divided, and let them manage the development process. Other names for this role are CTO, product owner, or project manager.

GET IN TOUCH TO DISCUSS YOUR IDEA

STEP 5: PREPARE CLEAR SPECIFICATION

As simple as it sounds, 80% of companies never have a specification of what exactly they create. Does it explain why 90% of great ideas are late to the market, go over budget, or never get implemented at all?

You know your vision, you have a technical partner, now sit down and create a list of key characteristics your system must-have.

If it is a physical device, e.g. IoT (Internet of Things) Product, you might specify:

- Key functions
- Dimensions and weight
- Battery life
- Interfaces (Bluetooth, Wifi, USB)
- Target cost at target annual quantity

This is a starting point that any development team will need from you to give you a quote.

If you want to use the template we use to create specifications for new products, fill in the form BELOW and I will share the step-by-step document.

DOWNLOAD PRODUCT SPECIFICATION TEMPLATE

STEP 6: HIRE A DEVELOPMENT TEAM

Another takeaway that I learned the hard way was the importance of working with a team rather than individual freelancers or developers. Initial cost-saving of hiring freelancers is very lucrative, but often causes huge opportunity cost and later reworking from scratch.

Working with freelancers may allow savings of about 20-30%, compared to working with a dedicated team. However, a team has established project management, processes, and allows them to add manpower if needed. Another benefit of working with a team is credibility. Technical feasibility documents and quotes may be used in fundraising.

To get a quote from the development team, have your Vision and Specification ready.

Always ask for an estimate of additional costs not included in the proposal

NEED HELP FINDING THE TEAM? SEND ME A MESSAGE

STEP 7: SECURE FUNDING AFTER GETTING THE QUOTE

Now that you have a clear vision and team who can make an idea a reality, run your numbers. I intentionally advise to look for financing AFTER getting the quote from the engineering team. You may realise you can finance yourself. If you get the funding from investors, they need to know exactly how much it's going to cost and how funds would be used. A written quote from the technology partner and initial engineering feasibility analysis would give investors peace of mind and understanding of cash flow.

TAKEAWAY: INVESTORS MUST KNOW YOU HAVE AN EXACT GAME PLAN. COME PREPARED

STEP 8: BUILD MVP, GET FEEDBACK, THEN ITERATE

The Technology world is changing very rapidly and so does market demand. As creators and idealists, we all love to over-think and over-perfect our creations, which delays the launch.
Just stop, OK?
Most of VCs and Investors we worked with recommended the "fail fast and pivot" approach.

Build a Minimum Viable Product (MVP)
Show to focus group of your ideal customers
Launch pre-sell with attractive "founder member" discount
Work on next version or pivot to another direction

It is essential to get feedback from your IDEAL CUSTOMER - not your friends or family. Most of our friends and family might not give honest feedback, or just not know the area. Iterate and perfect based on the demand of your target group.

Schedule FREE 20 min call to brainstorm

STEP 9: PROTECT YOUR IP

This is a BIG one - how and when to protect your intellectual property. If you've ever watched the ABC show "Shark Tank" where startups pitch their ideas to a panel of investors, you've most certainly heard the terms" patents", "patent pending", and "trademark".

I am sure you know that great ideas are worth patenting. What you might not know is WHEN to apply for a patent. Patents protect ideas not known to a general audience, so you MUST apply for your patent BEFORE you start marketing, sales, and advertising. There is a short window of time when you can apply for a patent; doing it too late has made many great ideas unpatentable.
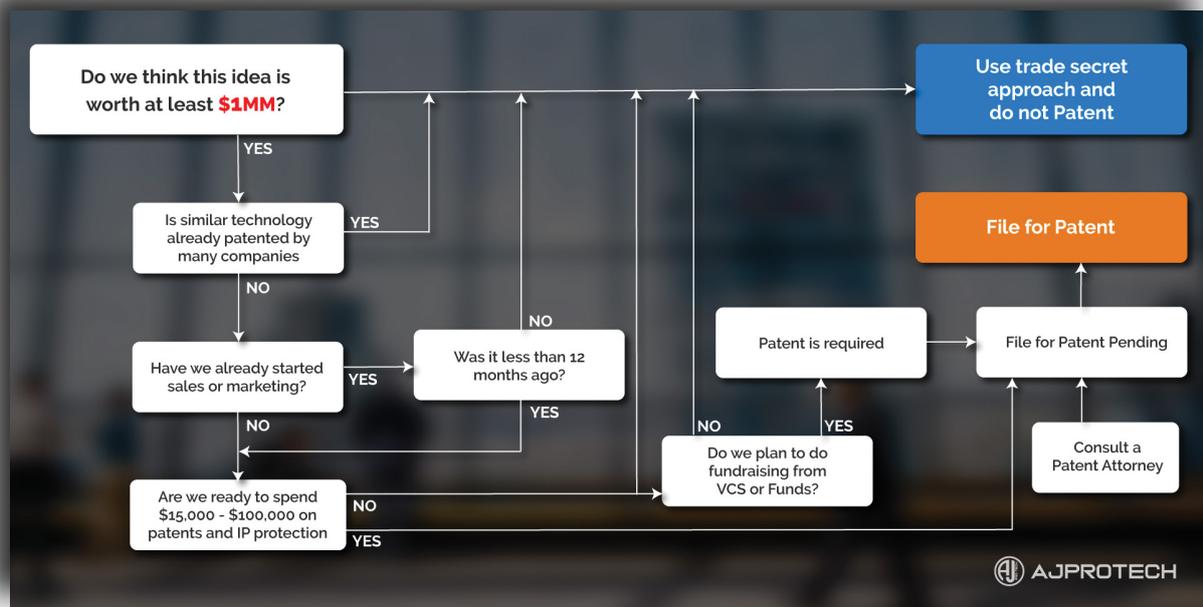
STEP 10: BE READY FOR THE UNEXPECTED

Product development is an exciting journey. Along the way, investors might pull away promised funds, certification agencies delay required documents, or vendors delay delivery. It is essential to have a buffer room for those aspects. My rules of thumb are:

> *timeframe: I always have 30-60 day buffer before important deadlines*
> *budget: have +30% buffer on top of projected expenses*
> *cashflow: have at least 8 weeks of fixed expenses set aside*

That saved us a lot of headaches and we very rarely got caught by surprise.

HOW I CAN HELP

I am a technology entrepreneur with a strong engineering background. After developing and launching over 40 technology products ourselves and for our clients, I continue to help companies develop new hardware and software products.

My business is "providing engineering teams as a service", I run an international team of Software, Electronics, and Industrial design engineers. We offer remote IT development and Hardware product design. We partner with companies who need product development - from base ideas to shippable product.

Visit our website to learn more: **ajprotech.com**

CONNECT ON LINKEDIN TO SEE MORE TIPS AND ARTICLES: **Alex Gudilko**

Contact us to discuss your project

Schedule FREE 20 min call to discuss how I can help